

WHAT IS CLAIMED IS:

1. An electronic method comprising:

accessing a network component;

retrieving a command set from the network component;

generating a representation of the retrieved command set, wherein the generated representation corresponds to the network component; and

storing the generated representation.
2. The method of claim 1, wherein generating a representation comprises:

generating a hash key corresponding to at least a portion of the retrieved command set.
3. The method of claim 2, wherein generating a representation comprises:

generating a hash object corresponding to the generated hash key.
4. The method of claim 2, wherein generating a hash key comprises:

identifying a first level configuration command in the retrieved command set;

identifying a second level configuration command in the retrieved command set;

and

concatenating at least an indication of the first level command and at least an indication of the second level command.

5. The method of claim 3, further comprising:
generating a configuration schema from the retrieved command set;
wherein the representation is generated from the configuration schema.
6. The method of claim 5, wherein the generated hash object includes data from the configuration schema.
7. The method of claim 3, wherein the generated hash object includes metadata.
8. The method of claim 1, wherein retrieving the command set comprises:
retrieving a set of primary commands;
retrieving a set of subcommands for each of the primary commands in the set of primary commands; and
retrieving a set of bounds for a plurality of the set of subcommands for a first of the primary commands.
9. The method of claim 8, wherein generating the hash key comprises:
combining at least an indication of the first of the primary commands with at least an indication of the first of the set of subcommands corresponding to the first of the primary commands.

10. A system comprising:
- a configuration hash key storage module;
 - a configuration hash object storage module in communication with the configuration hash key storage module; and
 - a configuration manager in communication with the configuration hash object storage module.
11. The system of claim 10, further comprising:
- a configuration hash generator in communication with the configuration hash object storage module.
12. The system of claim 11, further comprising:
- a configuration schema storage module in communication with the configuration hash generator.
13. The system of claim 10, wherein the configuration manager comprises:
- a device-neutral configuration command generator.
14. The system of claim 10, wherein the configuration manager comprises:
- a device-native configuration command generator.
15. The system of claim 10, wherein the configuration manager comprises:

a hash object-driven graphical user interface.

Exhibit A - Hash Object-Driven Graphical User Interface

16. A system comprising:
- an intermediate schema representation (ISR) key storage module;
 - an ISR object storage module in communication with the ISR key storage module;
- and
- a configuration manager in communication with the ISR object storage module.
17. The system of claim 16, further comprising:
- an ISR generator in communication with the ISR object storage module.

18. A method for interfacing with a network device, the method comprising:
- receiving a command in a first format, wherein the command is directed to the network device;
 - determining a device characteristic for the network device;
 - accessing a representation of a configuration schema corresponding to the determined device characteristic;
 - translating the received command from the first format to a second format using the accessed representation of the configuration schema; and
 - providing the command in the second format to the network device.
19. The method of claim 18, wherein the first format comprises a XML-based format.
20. The method of claim 18, wherein the second format comprises a CLI-based format.

21. A computer program product comprising:

a plurality of configuration command hash keys, each of the plurality of configuration command hash keys corresponding to at least one of a plurality of configuration commands;

a plurality of configuration command hash objects, wherein each of the plurality of configuration command hash objects corresponds to at least one of the plurality of configuration command hash keys;

wherein each of the plurality of configuration command hash objects comprises schema data corresponding to at least one of the plurality of configuration commands.